

The "features" register card is activated in Figure 4. A display and input area 120 can be used to activate, deactivate and/or configure the features which are available for the subscriber line. The display and input area 120 is embodied, like the display and input areas 106, 114, 108 and 116, as a "pull-down menu", it being possible to activate a selection list with possible setting functions by activating the button illustrated as an arrow. A list of features which can be activated for the subscriber line can be displayed in the display and input area 120 using this button.

The subscriber line of "Irena Romanski" is a subscriber line 30, 32 of the IP network 34. The subscriber signaling of the subscriber line 30, 32 is carried out using the network element 18 and the gatekeeper 22. In particular the network element 18 is used to provide the IP subscriber line 30, 32 of "Irena Romanski" not only with services and features of the IP network 34 but also with all the features of the telephone network 48. These services and features include call pick-up, call divert, call forwarding, call name display, subscriber cut-in, subscriber-dependent ringing, three-way conferencing, large-scale conferencing, holding, displaying of toll information, closed user group, private number schedule, call number identification, automatic call-back when busy, automatic call-back when no reply, call barring, call waiting and/or call transfer as well as IP network-specific services and features such as call forwarding with a non-registered IP subscriber and IP call pick-up 124.

The selection bar 122 can be used to activate the features displayed in the selection list. The activated features for the subscriber line 30, 32 are displayed in the display field 126. The "call waiting" feature which is currently activated for configuration is displayed in the display and input area 120. In accordance with the selected feature "call waiting", possible configuration possibilities of the feature for the subscriber line are illustrated in a display and input area 128. Control fields of the display and input area 128 can be used to set these configuration possibilities in an easy and clearly organized way. Further display and input areas 130, 132 are used to display further selection fields for configuring the "call waiting" feature.

The settings which have been made can be reset again to standard settings using a button 134.

Figure 5 illustrates the user interface 60, a setting facility for "preferred number schedules" having been selected using the first selection window 70. The number schedules which are available for the preset "high interest bank" subscriber displayed in the display area 66 are displayed in the second selection window 72. Display and input areas 136, 138, 140 are then displayed in the second selection window. Basic settings for the type of number schedules can be selected using the selection window 136. In the present exemplary embodiment, the group-based administration of number schedules has been selected. The number schedules which have been assigned to the network elements 12 to 24 are listed in the display and input area 138. The "high interest bank" subscriber group has a number schedule for six extensions, the "high interest bank 1" number schedule being assigned to the "North Munich" switching office which has the list number (directory number) 5594067 and can be used by subscribers via the access code 101.

The group name is presented in the first column 142, the switching office name in the second column 144, the group call number in the third column 146 and the access code in the fourth column 148 of the display and input area 138. For the groups "high interest bank 2" to "high interest bank 6" the name of the respective network element 12 to 24, the respective group call number and the respective access code are displayed, as was the case with the "high interest bank 1" group.

The group call number can be used by any public subscribers, and the access code can be used by subscribers 26, 28 of the telephone network 48 and subscribers 30, 32 of the IP network 34 to access any of these number schedules. The number schedules used by the subscribers 26 to 32 are stored as a copy in the network elements 12 to 24 which carry out the subscriber signaling of the respective subscriber. For the subscribers 26 and 28 this is the network element 12, for the subscriber 30 the gatekeeper 22 and for the subscriber 32 the gatekeeper 24. If the check field 150 is activated in the display and input area 140, after a call number or an alias name is changed, the copies of the number schedules stored in the

gatekeepers 22, 24 and in the network element 12 are automatically updated. The updating is also carried out after the addition of new subscribers or after the deletion of subscribers to the number schedules. The controller 36 automatically checks the data for consistency after input.

5           Figure 6 illustrates the user interface 60, it being possible to use the second selection window 72 to define access codes of the private number schedule for features. Appropriate display and input areas are presented in the second selection window 72. The "features" register card has been selected using a register card selection bar 152. All the feature groups available for the "high interest bank" subscriber group are displayed in a display and input area 154. The selection bar 164 is used to select a "call waiting" feature group. A single feature of the feature group selected in the display and input area 154 can be selected using a selection list of the display and input area 156. The "call waiting when Internet busy" feature which is available in the IP network 34 is selected using the selection bar 166.

10           Control symbols for deactivating the selected feature are defined using the display and input area 158. The control symbols for status interrogation of the feature are defined using the display and input area 160 and a display and input field 162 which is covered by the selection list of the display and input area 156, in order to activate the feature. In the present exemplary embodiment, in order to activate the "call

15           waiting when Internet busy" feature, the control symbols \*701 are defined for activation in the input and display field 162 (not illustrated), the control symbols \*702 for deactivation in the input and display field 158 and the control symbols \*703 for status interrogation in the input and display field 160. In this way, any subscriber can activate and deactivate the "call waiting when Internet busy" feature

20           using the keypad on his terminal by inputting these control symbols, and request the current setting of the feature using status interrogation.

          Figure 7 illustrates a block diagram of the controller 36 and of control units for subscriber administration. The central controller 36 for subscriber administration is connected via program interfaces to a control unit 168 for

30           controlling features of the telecommunications network 48 and to a connection